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(54) Title: NOVEL ENHANCERS OF PLANT GROWTH

(57) Abstract

The present invention provides novel enhancers of photosynthesis and plant growth and methods of using same. In one embodiment, the enhancer is derived from a microorganism. In alternative embodiments, the compounds are microbial extracts, microbial secretion products, and microbially generated natural products. The invention also provides a method for increasing net photosynthesis in a plant by applying an agent comprising triacetylphloroglucinol, diacetylphloroglucinol or monoacetylphloroglucinol to the plant in an amount effective in increasing net photosynthesis in the plant. The invention further provides novel bacterial genes and recombinant microorganisms comprising these genes which are used to practice the methods of the invention.